Annual Report on International Efforts to Restrict or Prohibit

Military Small Arms: Economic Interests in Humanitarian Disguise

by

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It has been my privilege throughout this decade to address you annually on international efforts to prohibit or restrict military small arms and ammunition. I regret that a last-minute family emergency prevented my attendance of last year's meeting to personally deliver my remarks. I preface my remarks by noting that they are offered in a personal rather than official capacity.

The focus of my remarks will be the continuing initiative by Switzerland and the International Committee of the Red Cross (ICRC) to cast Swiss economic interests in a humanitarian guise to prohibit certain types of current, lawful military small arms ammunition in order to sell Swiss-developed military ammunition.

A repeat of some of last year's summary[1] of the history of regulation of military small arms ammunition is necessary. In 1899, at the First Hague Peace Conference, Germany introduced a proposal condemning the new British caliber .303 Mark IV bullet, which was being produced at the Dum-Dum arsenal near Calcutta. German criticism was politically-motivated, and depended heavily on skewed German experiments using a different caliber, big-game hunting bullet substantially different from the British Mark IV. The German deception worked, and the conference (over U.S. and British objections) adopted the 1899 Hague Declaration Concerning Expanding Bullets that prohibits "bullets that expand or flatten easily in the human body, such as bullets with a hard envelope which does not entirely cover the core or is pierced with incisions." The United

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[1] "Update on International Efforts to Restrict or Prohibit Small Arms and Other Conventional Weapons," to be published in *News from The Institute for Research on Small Arms in International Security* (hereinafter *IRSAIS News*), Vol. 8, No. 3.

States never became a party to this treaty, but generally has applied it throughout this century (as have other nations) for the practical reason that, until recently, most military small arms would function reliably only with full metal-jacketed ammunition.

This scenario was repeated in the late 1970s as the United States developed and fielded the M-16 rifle with its 5.56 x 45mm projectile.[2] Sweden condemned the M-16 in part because of its opposition to U.S. military operations in Viet Nam, but primarily because the 5.56mm projectile represented a revolution in military small arms for which the Swedish small arms industry found itself totally unprepared. Swedish claims at a United Nations conference between 1978 and 1980 paralleled those of Germany in 1899. They relied upon skewed tests, and vastly exaggerated the wounding effects of the M-16 and its 5.56mm projectile. They were less successful in their endeavors, however, as the UN conference elected not to adopt an updated ban. As more nations adopted 5.56mm caliber weapons, NATO adopted the 5.56mm as a standard caliber (with the M855 [NATO SS-109] replacing the earlier U.S. M193 projectile), and the Soviet Union transitioned to 5.45 x 39mm-caliber weapons, the issue of the "illegality" of small-caliber weapons seemed to have run its course and died the death it deserved.

Enter the Swiss. In the late 1980s, Switzerland undertook two programs. First, it developed an improved version of the M193 as a competitor to the M855 projectile. Second, it consolidated small arms ammunition manufacturing at Thun in a state-of-the-art facility that can produce 500,000 5.56mm rounds per eight-hour shift – a capability clearly far greater than necessary for Swiss defense requirements, and equally clearly designed to compete in the international military ammunition market. But both accomplishments coincided with the end of the Cold War, and the bottom fell out of the small arms ammunition market.

Suddenly, the otherwise-marketless, Swiss-improved M193 took on a new guise through ICRC expressions of interest in a "humanitarian" bullet. The first evidence appeared at the 1990 ADPA small arms division meeting at Aberdeen Proving Ground, when an ICRC representative lectured the assembly on the "illegality" of certain small arms ammunition.[3] Beat Kneubuehl, Head of the Swiss Defence Technology Service and designer of the improved, so-called "humanitarian" bullet, addressed the ADPA Small Arms Division annual meeting one year later on the same subject.[4] The ICRC maintained the initiative in other international fora.[5]

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[2] For a summary, see the author's 1990 presentation, "Political-Legal Factors in Small Arms Research and Development," republished in *IRSAIS News*, Vol. 2, No. 2 (February 1991), pp. 10-14.

[3] Gerard C. Cauderay, "Concerns of the International Committee of the Red Cross with Regard to the Effects of High-Energy Transfer Bullets and the Methodology of Research in the Field," subsequently published in *IRSAIS News*, Vol. 2, No. 1 (December 1990), pp. 14-16. A critique of the Cauderay paper by Dr. Martin L. Fackler was published in *IRSAIS News*, Vol. 2, No. 2 (February 1991), at p. 5.

[4] "On the Effectiveness of Small Arms Ammunition" (Atlanta, November 6, 1991).

To understand the basis for the Swiss-ICRC initiative, it is necessary to return to the 1899 Hague Peace Conference. The U.S. delegate opposed the German condemnation of the British Mk. IV, in part because it banned one form of bullet design – a bullet with an exposed lead core and skiving – while permitting others that might have similar terminal ballistics, such as a bullet designed to yaw early, or with a soft full-metal jacket that would fragment, or both. His arguments were soundly rejected by his fellow conferees. Thus the represented nations made a conscious decision that bullets that yaw or that may fragment on impact with soft tissue should not be banned.

Let me repeat and emphasize an historical fact I have mentioned in previous presentations: *Every military rifle projectile used in combat in this century will fragment on impact with soft tissue under certain conditions*. Mr. Kneubuehl developed his 5.56mm projectile to defeat Soviet body armor, not to diminish the terminal ballistic effects of the 5.56mm military projectile. When the Cold War ended the Warsaw Pact and its threat, Kneubuehl and the ICRC fashioned an argument that military small arms bullets that *might* fragment should be regarded as tantamount to dum-dums, and banned.

The present Swiss-ICRC argument is that the "gap" that has existed throughout this century needs to be closed with (a) an international prohibition of small arms projectiles that may yaw early and/or fragment on impact with soft tissue, and (b) the establishment of an international wound ballistics testing center at Thun, to be run by Kneubuehl. (Claims that Kneubuehl's bullet does not fragment in soft tissue have not been borne out in wound ballistic testing.) Their arguments are technically flawed, and Kneubuehl's wound ballistic tests were skewed to favor the ICRC initiative.[6]

This initiative attempts to address a problem that does not exist. The terminal ballistics effects of military small arms ammunition have been consistent throughout this century. Military fatalities from small arms wounds have diminished, not increased, and cannot compare with the wounding effects of military weapons a century ago. Nor can the wounding effects of military small arms compare with those of other weapons, such as artillery, land mines,[7] or the Claymore mine. The ICRC-Swiss initiative also conveniently ignores the obvious: military weapons are designed to kill or disable.

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[5] See, *e.g.*, ICRC, "The ICRC and Its Work in Relation to Conventional Weapons and New Weapons Technologies," United Nations General Assembly, 46th Session (October 30, 1991); and "Prohibitions or Restrictions on Certain Conventional Weapons and New Weapons Technologies," paper prepared for the XXVIth Conference of the International Conference of the Red Cross and Red Crescent, Budapest, November-December 1991, pp. 27-28.

[6] For a recent critique, see Martin L. Fackler, "Civilian Gunshot Wounds and Ballistics: Dispelling the Myths," *Contemporary Issues in Trauma* 16,1 (February 1998), pp. 17-28, and particularly his discussion of the Swiss "high-velocity myth," "kinetic energy deposit" and "energy transfer" theories at pp. 18-23.

[7] Recent international efforts to ban antipersonnel land mines were not based upon the severity of their wounding effect when used against combatants, but rather on the risk posed to civilians due to the indiscriminate effect of their irresponsible use by warring factions in internal conflicts in less-developed nations.

Yet the ICRC and the Swiss persisted, proposing a new protocol to the 1980 United Nations Conventional Weapons Convention at its first review conference, held between 1994 and 1996. Response from other delegations ranged from strong opposition (including the United States) to disinterest, and the Government of Switzerland withdrew its proposal before the conference concluded. An ICRC attempt at its own conference to raise the issue anew was not supported by participating nations.

The ICRC-Kneubuehl proposal was renewed through a Swiss-sponsored international workshop on wound ballistics held in Interlaken in October 1997. It was my privilege to represent the United States. At my request, Dr. Martin L. Fackler, a leading expert in wound ballistics, joined me. Our participation was preceded by a strong demarche by the Department of State to other governments advising them that the United States believed the Swiss initiative lacked scientific and evidentiary support, and represented a misplaced priority of effort.

The program included presentations by Kneubuehl, two ICRC representatives, a review of the legal issues by my Netherlands Ministry of Defense counterpart, and a tour of the Swiss Low Noise Ballistic Ranges at Thun.

Kneubuehl's presentation contained serious technical flaws, all skewed to support his efforts. It was critiqued by Dr. Fackler in the *Wound Ballistics Review*.[8] The "case studies" by ICRC representatives were similarly flawed, describing treatment of gunshot wounds in less-developed nations by small arms of unknown type, caliber, or condition, at unknown ranges, of less-fit civilians receiving initial treatment at times ranging as high as one week after wounding – hardly an effective scientific study, or comparable to modern medical treatment on the conventional battlefield. The Dutch legal representative concluded that the time for the ICRC-Kneubuehl proposal "was not ripe," a conclusion I supported in remarks I was asked to give by the presiding officer.[9] My British counterpart and others supported my remarks in turn. There was no support for the ICRC-Swiss initiative.

The ICRC-Kneubuehl initiative addresses a non-existent problem. It took 50,000 rounds to wound a single enemy soldier during the Viet Nam War. A 5.56mm bullet may fragment on impact with soft tissue, depending upon the variables I listed in last year's presentation, such as range, degree of projectile yaw at impact, and length of wound tract. The probability of a M855 bullet fragmenting in soft tissue may be in excess of one in 500,000. Even if it does fragment, its effects still pale when compared to other, lawful battlefield wounding mechanisms. Yet the ICRC and Kneubuehl labor on, portraying any

[8] Martin L. Fackler, "International Workshop on Wound Ballistics, Interlaken, Switzerland, 7-8 October 1997," *Wound Ballistics Review* 3,3 (1998), pp. 42-43.

[9] Statement by the United States Representative at the International Workshop on Wound Ballistics, Interlaken, 8 October 1997. Copies available from the author.

change in bullet design – such as an improved ballistic co-efficient to enhance accuracy – as something sinister and evil. It also is an effort badly misdirected. The problem in internal conflicts in Angola, Rwanda and other parts of sub-Sahara Africa, the former Yugoslavia, Kosovo, and elsewhere, is illegal use of lawful weapons, not a military small arms projectile that might fragment once in every half-million rounds fired.

Like the Energizer bunny, the ICRC and Kneubuehl effort keeps on running. The letter forwarding the official report of the workshop inexplicably and inaccurately concludes, "the Workshop showed that there seems to be no disagreement on the fact that there are weapon systems that can have effects which resemble those of the outlawed dum-dum bullets. Furthermore, there was evidence that there is a need to further analyse and weight (*sic.*) the question of military necessity versus humanitarian requests, and to establish a common standard testing methodology."[10] This conclusion is totally inconsistent with my workshop observations.

There is a simple reason for the continued Swiss-ICRC effort. Swiss Ministry of Defense armaments facilities, including the Thun ammunition manufacturing plant, are in the process of being privatized.[11] The Government of Switzerland will subsidize the Swiss military small arms ammunition program during its transition period, selling ammunition at a substantially discounted price to gain entry into the international military small arms ammunition market.[12]

The ICRC-Kneubuehl effort through this decade is keyed to this transition, and is a part of it. It endeavors to establish a new international legal standard that only Kneubuehl's 5.56mm projectile will meet, thus facilitating the Swiss Munition Enterprise's capture of the international military small arms ammunition market. The reason the ICRC and Kneubuehl persist in their endeavors has been acknowledged by official Swiss sources: to preserve the Swiss small arms industrial base, and Swiss jobs. In a word, the "humanitarian" concern expressed by the ICRC is bogus.[13]

As I indicated last year, the threats in our world have increased, not diminished, since the end of the Cold War. The threats also have changed, as has the way the public

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[10] Letter of Joerg Koehler, General Staff, Global Arms Control and Disarmament, General Staff (April 9, 1998), forwarding "International Workshop on Wound Ballistics – Documentation."

[11] They will become a part of the Swiss Munition Enterprise.

[12] The subsidy will be fifty per cent. Thus a 5.56mm military small arms round that normally would sell for (for example) fifty cents per round would be sold for $.25, with the Government of Switzerland paying the other $.25. This subsidy would be phased out once the Swiss Munition Enterprise has gained entry into the international military small arms ammunition market.

[13] It also is inconsistent with the ICRC Fundamental Principles, which (among other things) are a condition for government contributions to the ICRC. The ICRC Principle of *independence* requires that it maintain its autonomy from the Government of Switzerland. It appears it has not done so in this case.

and national and international leadership expect military forces to respond to them. Our military forces are expected to address each threat quickly, with minimum civilian and friendly force casualties. Simultaneously, environmentalists are calling upon the police and military to develop, acquire and use environmentally safer ammunition.[14]

The military will be expected to employ environmentally safer, reduced ricochet, enhanced accuracy ammunition in missions across the conflict spectrum. In military operations in urban terrain (whether in peace operations or conventional international armed conflict), peace operations, and other missions such as counterterrorism, our ammunition will need to meet all of these requirements while also minimizing over-penetration risk, simultaneously defeating terrorists or other threats wearing body armor. We cannot deploy our troops with multiple loads of ammunition, requiring them to change magazines according to the threat of the moment. We must come up with a single, all-mission projectile.

The Kneubuehl-designed 5.56mm bullet cannot meet the various requirements and threats I listed in the preceding paragraph. Indeed, it is a move in the exact opposite of the direction I see occurring. Mr. Kneubuehl designed a bullet for a NATO-Warsaw Pact confrontation on a battlefield virtually devoid of civilians, a threat and scenario that, for the most part, ended a decade ago. Over-penetration risks are greater, increasing the risk to hostages, to hostage rescue personnel, or to innocent civilians in peace operations, military operations in urban terrain, or other operations where civilians may be present. Both the M855 and the Kneubuehl projectile may be regarded as obsolete in the future because neither is environmentally safe, and their overpenetration characteristics pose too great a risk to innocent civilians.

We have the technical capability to meet what I have suggested will be the requirements for a military small arms projectile for today's – and future – threats and scenarios. The opportunity is in your hands. It will depend in large measure, however, on the degree to which you are prepared to wrest the moral high ground from the ICRC, Swiss industrialists, and the Government of Switzerland.

Understand the challenge: one source estimates that the ICRC spent more than thirty million dollars in U.S. Government donations in its successful campaign to ban landmines, which it sees as a valuable precedent for its small-arms initiative.[15] It seems likely that it is prepared to spend as much, or more, to benefit Swiss economic interests. It may succeed, if you permit it.

Thank you for your time.

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[14] See, *e.g.*, Paul S. Scarlata, "Next Wave Indoor Ammo," *American Rifleman* (April 1998), p. 31.

[15] Major General Jarvis D. Lynch, USMC (Ret.), "Landmines, Lies and Other Phenomena," *United States Naval Institute Proceedings* (May 1998), pp. 44-49, at 48.